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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q68108

Katsuya IWABUCHI, et al.

Appln. No. 10/046,198

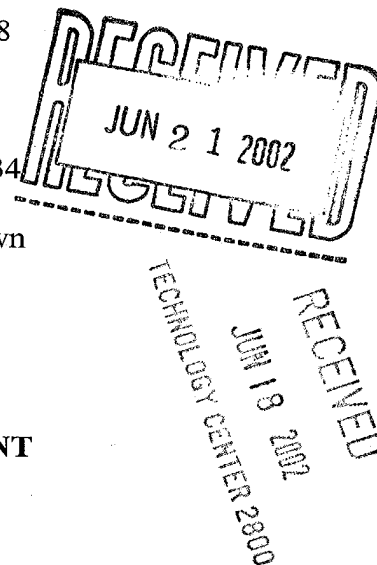
Group Art Unit: 2834

Confirmation No.: 3062

Examiner: Unknown

Filed: January 16, 2002

For: ELECTROMAGNETIC SOUND GENERATOR



INFORMATION DISCLOSURE STATEMENT  
UNDER 37 C.F.R. §§ 1.97 and 1.98

Commissioner for Patents  
Washington, D.C. 20231

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the document which is listed on the attached PTO/SB/08 A & B (modified) (substitute for PTO Form 1449) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

One copy of the listed document is submitted herewith.

1. Japanese Utility Model Laid-Open Patent Application No. 61-38831, published March 11, 1986 with partial translation.

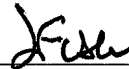
The present Information Disclosure Statement is being filed: (1) No later than three months from the application's filing date for an application other than a continued prosecution application (CPA) under §1.53(d); (2) Before the mailing date of the first Office Action on the

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INFORMATION DISCLOSURE STATEMENT

merits (whichever is later); or (3) Before the mailing date of the first Office Action after filing a request for continued examination (RCE) under §1.114, and therefore, no Statement under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

The submission of the listed document is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

Respectfully submitted,



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## Information Disclosure Statement

Title of the device:

UNUSUAL TEMPERATURE DETECTING DEVICE FOR CURRENT-CARRYING ROOT

Particulars:

Japanese Utility Model Laid-Open  
No.38831/1986(Showa 61)

Laid-Open Date: March 11, 1986

Inventor: HAYASHI NAGAUMI et al.

Applicant: Co. Fujidenki Sogo Kenkyusyo

### WHAT IS CLAIMED:

1. An unusual temperature detecting device for current-carrying root comprising: a magnetic needle manufactured by permanent magnet provided so as to enable it to vibrate and adjacent to a part of current-carrying root where there is a potential of overheating in current-carrying period, a holding mechanism for restraining a vibration of the magnetic needle as to be almost impossible to vibrate at predetermined temperature and to release a restriction so as to be able to vibrate, and a sound generator generating a sound by striking of the vibrating magnetic needle released from its restriction.
2. An unusual temperature detecting device for current-carrying root according to claim 1, where the sound generator generating a sound by striking of the magnetic needle are made of shape-memory alloy and combine with the holding component for restraining a vibration of the magnetic needle as to be impossible to vibrate and a release of the restriction so as to be able to vibrate.

3. An unusual temperature detecting device for current-carrying root according to claim 1, where the sound generator generating a sound by striking of the magnetic needle is made of a material which keeps its shape better independently of temperature and the holding component for restraining a vibration of the magnetic needle so as to be impossible to vibrate and to release a restriction so as to be able to vibrate is made of material which is transformed according to temperature.

**BRIEF EXPLANATION OF THE DRAWING:**

Fig. 1 showing the embodiment of the present utility model.  
Fig. 2 showing another embodiment of the present utility model.  
Fig. 3 showing a vertical sectional view of an example of normal configuration of connecting section of a current-carrying conductor.

- 1. Current-carrying conductor
- 1a. Connector
- 2. Contact piece
- 11. Sound generator
- 12. Magnetic needle
- 13. Holding component

Substitute for Form 1449 A & B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<i>Complete if Known</i>	
				Application Number	10/046,198
				Confirmation Number	3062
				Filing Date	January 16, 2002
				First Named Inventor	Katsuya IWABUCHI
				Art Unit	2834
				Examiner Name	Unknown
Sheet	1	of	1	Attorney Docket Number	Q68108

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number	Kind Code <sup>2</sup> (if known)		
		US			
		US			
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FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Translation <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)			
		JP	61-38831	U	03/11/1986		Partial Translation

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	Translation <sup>6</sup>

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov), MPEP 901.04 or in the comment box of this document. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to indicate here if English language Translation is attached.